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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/084,049 | 02/28/2002 | David L. Whitmore | P21585 | 8566 |

7055 7590 05/08/2003

GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

JAGANNATHAN, MELANIE

| ART UNIT | PAPER NUMBER |
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2666

DATE MAILED: 05/08/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,049

Applicant(s)

WHITMORE ET AL.

ppg

Examiner

Melanie Jagannathan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allain et al. U.S. 6,449,259.

Regarding claim 1, the claimed ascertaining availability of the multiple routes is disclosed by communication controller (Figure 1, element 100) monitors and measures quality of service of the networks for the routing of information signals between a plurality of communication networks (elements 134, 136, 138). The claimed receiving data from a selected application of the plurality of applications is disclosed by signals sent from user to another user being routed through PSTN or Internet or other packet switched network. See column 5, lines 22-28 and column 10, lines 36-39. The claimed determining a designated route that is associated

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with the selected application is disclosed by signals being routed through communication link (element 140) to PSTN (element 134) or routed through communication link (element 142) to Internet (element 136) or through communication link (element 144) through another packet switched network (element 138). The claimed sending of the received data over the designated route when the designated route has been ascertained to be available is disclosed by decision processing module (element 106) sending decision message to reroute processing module to either reroute information signals through different network or continue use of current network based on quality of service monitoring. See column 7, lines 36-47.

Allain et al. discloses all the limitations of the claims except for the method used in wireless networks. Allain discloses networks (Figure 1, elements 134,136,138) can be wireless communication networks. See column 12, lines 3-7. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to implement wireless networks in the communication networks of Allain et al. One of ordinary skill in the art would be motivated to do this for cost saving and routing efficiency.

Regarding claims 2,8, the claimed designated route depending on port number assigned to selected application is disclosed by data I/O points (elements 115,117,119) assigned to PSTN, Internet or other packet switched network respectively.

Regarding claims 3, 4,9 the claimed designated route depending on IP address associated with selected application is disclosed by Internet (element 136).

Regarding claim 5, the claimed data being ignored is disclosed by if communication controller determines quality of service is at unacceptable level for designated network, the data is not sent to that network. See column 4, lines 56-65.

Regarding claims 6,7, the claimed default and alternate routes is disclosed by if communication controller determines quality of service is at unacceptable level for designated network, the data is rerouted to another network. See column 4, lines 56-65.

Regarding claim 10, the claimed notifying a host network server is disclosed by decision processing module (element 106) sending decision message to reroute processing module to either reroute information signals through different network or continue use of current network based on quality of service monitoring and network port routes information signals to network. See column 7, lines 36-47.

Regarding claims 11, 15, 17-19,24,27,29-30, Allain et al. discloses all the limitations of the claims except for the method used in wireless networks and a mobile router comprising a port routing table.

Allain discloses networks (Figure 1, elements 134,136,138) can be wireless communication networks. See column 12, lines 3-7. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to implement wireless networks in the communication networks of Allain et al. One of ordinary skill in the art would be motivated to do this for cost saving and routing efficiency.

Allain et al. discloses packet phone gateway with gateway interfaced directly to communication controller containing decision processing module (element 106) which maintains list of networks over which data should be routed based on quality of service network characteristic measurement information and network criteria data received by User/System Criteria module (element 104) for the PSTN, IP or packet-switched network where port number 115 is for PSTN, port number 117 is for Internet, port number 119 for packet switched network.

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At the time the invention was made it would have been obvious to modify the gateway of Allain et al. with mobile router as part of wireless network. One of ordinary skill in the art would be motivated to do so for proper routing.

Regarding claims 12-14, the claimed alternate, default and ignore routes specified based upon at least one of a port number, IP address and protocol is disclosed by routes being specified by quality of service for PSTN, IP and packet-switched networks which have different protocols where if quality of network is unacceptable the data is ignored by that network and rerouted over alternate or default routes. See column 4, lines 54-65 and column 7, lines 36-47.

Regarding claim 16, Allain et al. discloses all the limitations of the claims except for a mobile router notifying the host network server whenever any wireless network enters an in-coverage state. Therefore, examiner takes official notice of the concept and the advantage of having a mobile router notify the host network server whenever any wireless network enters an in-coverage state. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify system of Allain et al. with a mobile router to notify the host network server whenever any wireless network enters an in-coverage state. One of ordinary skill in the art would be motivated to do this for efficient call processing during roaming.

Regarding claim 20-23, the claimed port route type indicator comprises alternate, ignore and default indicators is disclosed by choice of port to route data through based on quality of service so data is rerouted through another network when original network is unacceptable so original network route is ignored and other network is the alternate or default route. See column 4, lines 54-65 and column 7, lines 36-47.

Regarding claim 25-26,28, the claimed protocol type identifying transport level protocol type of packet is disclosed by routing of packet by network port (Figure 1, element 112) to IP network (element 136), the claimed port number assigned to selected application is disclosed by data I/O points (elements 115,117,119) assigned to PSTN, Internet or other packet switched network respectively and the claimed network ID identifies which network is used to route data is disclosed by network port routing packets by way of data I/O points (elements 115,117,119) assigned to PSTN, Internet or other packet switched network.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pearce et al. US 5,910,951 disclose communication over a multiplicity of networks with a filter that generates a prioritized list of qualifying networks.

Kaplan et al. US 6,456,594 disclose multi-protocol communications routing optimization.

Dutta et al. US 5,953,319 disclose wide area mobile communication networks with multiple routing mode options.

Rahman et al. US 6,002,670 disclose optimization and recovery techniques in IMA networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 703-305-8078.

The examiner can normally be reached on Monday-Friday from 8:00 a.m.-4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 703-308-5463. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9315 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Melanie Jagannathan
Patent Examiner
AU 2666

MJ
May 3, 2003



DANG TON
PRIMARY EXAMINER



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Patent and Trademark Office

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